

Suggestion:  
"Leather Box"  
(for Visaton DIY LS kit ARIA (satellite))

You will need:

- Your loudspeaker boxes
- Leather (or leather immitate)
- Soft stuffing (soft fibre fabric or foam, 5..10mm)
- Sewing machine (or sewing service)
- Crimp tacker
- Pen, meter, scissors



Place your leather material on a clean, smooth work table (backside up).

With a pen, draw the outlines of your boxes' four side walls onto the leather backside, by rolling the box from one side to next.

Make sure to keep about 1..2cm rim towards any next edge. On the side corresponding to the lower edge of your speaker box, you might want to leave even 2..3cm rim. (This bottom rim will later be crimp-nailed to the speaker box bottom.)

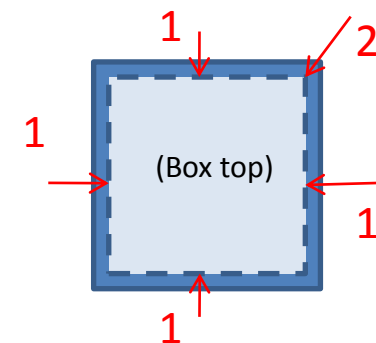
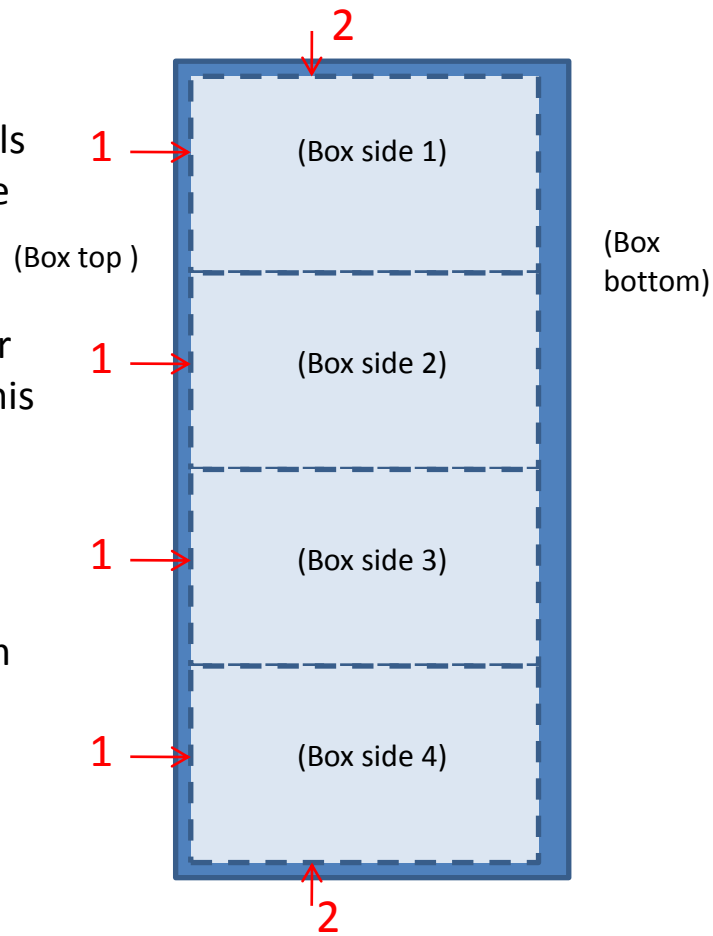
Also draw the outline of your boxes' top surface on to another length of leather. Again, leave about 1..2cm of rim to any next edge.

Cut the pre-drawn pieces (including rim) using scissors.

(Optional: Mark with a pen where each seam should connect to another seam, depending where you would like the vertical seam to be placed finally).

Repeat this for all boxes you will cover.

Get the pieces sewed together (simple 1-line seams to inside), i.e. using a professional service or your mothers/wifes goodwill.



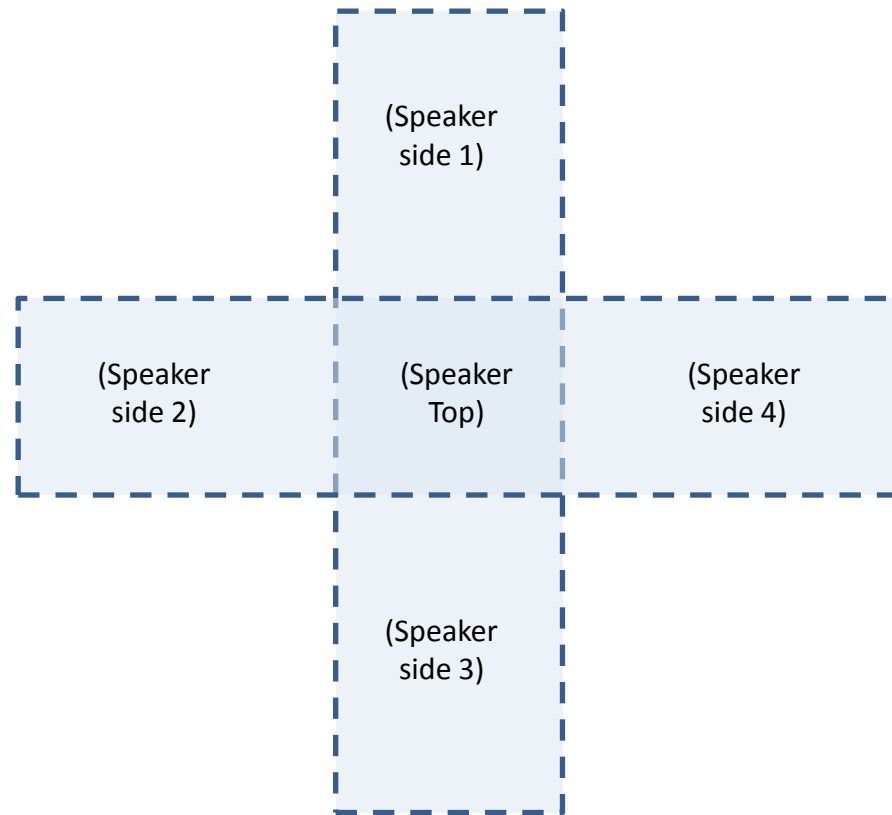
Sewing seams (1),(2)

(Stuffing layer is recommended to give a soft touch and to avoid ugly "folds" of the stretching leather.)

Place your stuffing material on a clean work table.

Mark and then cut a cross representing the outlines of your box.

Hint: You may want to cut the outlines 5mm smaller to avoid visible overlaps when this layer is finally stretched during assembly.



With all speaker elements and terminals removed from your speaker box, place the box standing on a table or suitable work plane. (Make sure all working area is clean, to avoid scratching the leather surfaces!)

Attach the prepared stuffing layer to the box, from top and sides to bottom, pre-stretch it slightly. Fix the ends with some easy-to-remove tape to the box. Cut away any redundant lengths if needed.

Then carefully pull the readily sewed "leather hat" over the box, make sure it is aligned well without any folds especially on the sides most important to you, i.e. The front. The vertical seam (2) is best placed on one backside edge of the box. This may need some practising for best result - the sewed leather piece may have some small shape distortions. Stretching and the stuffing helps to compensate.

When the leather is set into satisfying position, fix the bottom ends by some easy-to-remove tape.

Now you might want to draft the outlines of the boxes' holes using a pen (can be seen in this picture already) and then carefully cut out the holes for the speaker elements etc. with scissors. Make sure to leave enough rim (1cm or more) to go underneath the speaker elements' front plates later.



Now assemble your speakers, terminals and BR tubes back in place.

Note: The screws, tubes etc. tend to jam the leather inside tight gaps, which may cause unequal stretching marks next to them. Make sure to relax the leather before finally fixing it (e.g. unscrew and rescrew the parts). Avoid "turning" BR tubes in place, rather try to push them straight in. (Ideally, you may grind very tight gaps slightly wider before covering your boxes with leather.)

Finally, remove the redundant tapes from the bottom side and crimp the remaining leather rims to the bottom surface of your box. Think about best order and resulting shape of folds, to obtain best possible look for the front side of your speaker box!



The finished "Leather Box".

Unique, chic, natural, acoustically beneficial.

